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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,527

03/03/2004

Dimitri Saey

1875.4880001

3355

26111 7590 11/24/2008
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EXAMINER

LEE, SIU M

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

11/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/791,527	Applicant(s) SAEY, DIMITRI	
	Examiner SIU M. LEE	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-11, 14-16, 19-23, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7, 20-23 and 26 is/are allowed.
- 6) ☒ Claim(s) 8-11, 14-16, 19, 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 7-11, 14-16, 19-23, and 26-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-11, 14-16, 19 and 27 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Allowable Subject Matter

3. Claims 1-4, 7, 20-23, 26 are allowed.

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4. The following is a statement of reasons for the indication of allowable subject matter:

(1) Regarding claims 1-4, and 7:

The present invention describes a modem comprising a carriergroup transmitting means configured to be coupled to a transmission channel; a carriergroup receiving means configured to be coupled to the transmission channel for receiving parameters relating to a plurality of carriers in the transmission channel; a carriergrouping means, configured to be coupled to the carriergroup transmitting means and to the carriergroup receiving means, for determining a plurality of carriergroup parameters and at least one dynamically variable size carrier group for the plurality of carriers in the transmission channel based on the parameters received by the carriergroup receiving means; and a tone decoder configured to be coupled to the transmission channel; wherein the plurality of carriergroup parameters comprises a carriergroup gain parameter and is used to dynamically set up the tone decoder; wherein the carriergroup transmitting means transmits at least one message to the transmission channel comprising the at least one plurality of carriergroup parameter parameters and the at least one carrier group. The closest prior art, Peeters et al. (US 2001/0012783 A1) and Klinski (US 2002/0039398 A1) together disclose a similar system but fail to disclose the plurality of carriergroup parameters comprises a carriergroup gain parameter and is used to dynamically set up the tone decoder. This distinct feature has been added to the independent claims 1, therefore, rendering claims 1-4 and 7 allowable.

(2) Regarding claims 20-23, and 26:

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The present invention describes a modem for grouping a plurality of carriers in a DMT communication system coupled to a far-end modem via a transmission channel, the modem comprising carriergrouping means for determining multiple dynamically variable sized carrier groups for the plurality of carriers and for determining a plurality of carriergroup parameters for each of the multiple carrier groups; carriergroup transmitting means for transmitting messages comprising the plurality of carriergroup parameters to the far-end modem via the transmission channel, to enable the far-end modem to send and receive messages using the multiple carrier groups; and a tone decoder coupled to the transmission channel wherein the plurality of carriergroup parameters is used to dynamically set up the tone decoder and wherein the plurality of carriergroup parameters comprises a carriergroup gain parameter. The closest prior art, Peeters et al. (US 2001/0012783 A1) and Klinski (US 2002/0039398 A1) together disclose a similar system but fail to disclose a tone decoder coupled to the transmission channel wherein the plurality of carriergroup parameters is used to dynamically set up the tone decoder and wherein the plurality of carriergroup parameters comprises a carriergroup gain parameter. This distinct feature has been added to the independent claims 20, therefore, rendering claims 20-23, and 26 allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIU M. LEE whose telephone number is (571)270-1083. The examiner can normally be reached on Mon-Fri, 7:30-4:00 with every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Siu M Lee/
Examiner, Art Unit 2611
11/13/2008

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611